

Patent claims

1. A grinding head with a disk-shaped basic body which carries a plurality of rotatably driven grinding disks, with a flexible drive, mounted in a housing, for a drive shaft having a spherical driving head on which is seated a two-part connection piece which is mounted so that it can pivot about a driver pin of the driving head, with a rotationally fixed transmission connection between the driving head and flexible drive means for driving the rotatably mounted grinding disks, and with a high-reduction transmission between the driving head and the disk-shaped basic body, characterized in that the grinding head is formed from three assemblies which can be detached from one another, specifically a drive part (1) seated in a housing (4), a transmission part (2) and a disk-shaped basic body (3), in that the transmission part (2) has a central body (15) for coaxially receiving the connection piece (9) so that it can rotate, in that the high-reduction bearing section (18) is mounted radially outside the central body (15) and is secured to the housing (4) on the one side and has its high-reduction part (20) for transmitting the rotational movement connected to the radially inner disk body (30) of the disk-shaped basic body (24), in that the disk body (30) is seated rotatably on a hub (28) which engages in a socket (25) of the transmission part (2) in a positively locking manner, and in that a central driver disk (32) for driving the grinding disk is arranged on the hub (28) in a rotationally fixed manner.

2. The grinding head as claimed in claim 1, characterized in that the flexible drive means used are chains or toothed belts.

3. The grinding head as claimed in either of the preceding claims, characterized in that the high-

reduction transmission is a harmonic drive transmission.

4. The grinding head as claimed in one of the preceding claims, characterized in that the grinding disks (36) are each seated on pivotably mounted levers for the purpose of adjusting their distance from the center point of the basic body.

10 5. The grinding head as claimed in one of claims 1 to 3, characterized in that the grinding disks (40) are mounted in a rotatably driven manner on the disk body.

15 6. The grinding head as claimed in one of the preceding claims, characterized in that a flexible drive element for driving the grinding disks (36) runs around the central driver disk (32) and the driver disks (32) which are in drive connection with the individual grinding disks (36).

20 7. The grinding head as claimed in one of the preceding claims, characterized in that a stop (19) is provided on that side of the transmission part (2) which faces the drive part (1) and butts against the drive part in a blocking manner during the rotational movement of the transmission part (2) about its axis.

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